Service instructions

for contractors

Vitoplex 200
Type SX2A, 700 to 1950 kW
Oil/gas boiler

For applicability, see the last page

VITOPLEX 200

5692 849 GB 10/2013

Please keep safe.

Safety instructions

Please follow these safety instructions closely to prevent accidents and material losses.

Safety instructions explained

Danger
This symbol warns against the risk of injury.

Please note
This symbol warns against the risk of material losses and environmental pollution.

Note
Details identified by the word "Note" contain additional information.

Target group

These instructions are exclusively intended for qualified contractors.
- Work on gas installations must only be carried out by a registered gas fitter.
- Work on electrical equipment must only be carried out by a qualified electrician.
- The system must be commissioned by the system installer or a qualified person authorised by the installer.

Regulations

Observe the following when working on this system:
- Statutory regulations regarding the prevention of accidents
- Statutory regulations regarding environmental protection
- The Code of Practice of relevant trade associations
- All current safety regulations as defined by DIN, EN, DVGW, TRGI, TRF, VDE and all locally applicable standards,
  Gas Safety (Installation & Use) Regulations the appropriate Building Regulationeither the Building regulations, theBuilding Regulation (Scotland), Building Regulations (Northern Ireland), the Water Fittings Regulation or Water Bylaws in Scotland, the current I.E.E. Wiring Regulations.

If you smell gas

Danger
Escaping gas can lead to explosions which may result in serious injury.
- Do not smoke. Prevent naked flames and sparks. Do not switch lights or electrical appliances on or off.
- Close the gas shut-off valve.
- Open windows and doors.
- Evacuate any people from the danger zone.
- Notify your gas or electricity supplier and your local heating contractor from outside the building.
- Shut off the electricity supply to the building from a safe place (outside the building).

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Safety instructions (cont.)

If you smell flue gas

Danger
Flue gas can lead to life threatening poisoning.
- Shut down the heating system.
- Ventilate the installation site.
- Close all doors in the living space.

Flue systems and combustion air

Ensure that flue systems are clear and cannot be sealed, for instance due to accumulation of condensate or other causes. Ensure a sufficient supply of combustion air.
Instruct system users that subsequent modifications to the building characteristics are not permissible (e.g. cable/pipework routing, cladding or partitions).

Danger
Leaking or blocked flue systems, or an insufficient supply of combustion air can cause life threatening poisoning from carbon monoxide in the flue gas.
Ensure the flue system is in proper working order. Apertures for supplying combustion air must be non-closable.

Extractors

Operating appliances that extract air to the outside (cooker hoods, extractors, air conditioning units, etc.) can create negative pressure. If the boiler is operated at the same time, this can lead to reverse flow of the flue gas.

Danger
The simultaneous operation of the boiler and appliances that extract air to the outside can result in life threatening poisoning due to reverse flow of the flue gas.
Fit an interlock circuit or take suitable steps to ensure a sufficient supply of combustion air.

Working on the system

- Where gas is used as the fuel, close the main gas shut-off valve and safeguard it against unintentional reopening.
- Isolate the system from the power supply (e.g. by removing the separate fuse or by means of a mains isolator) and check that it is no longer 'live'.
- Safeguard the system against reconnection.

Danger
Hot surfaces can cause burns.
- Before maintenance or service work, switch OFF the appliance and let it cool down.
- Never touch hot surfaces on the boiler, burner, flue system or pipework.

Please note
Electronic assemblies can be damaged by electrostatic discharge.
Before beginning work, touch earthed objects, such as heating or water pipes, to discharge static loads.

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Safety instructions (cont.)

Repair work

Please note
Repairing components that fulfil a safety function can compromise the safe operation of the system.
Faulty components must be replaced with original Viessmann spare parts.

Auxiliary components, spare and wearing parts

Please note
Spare and wearing parts that have not been tested together with the system can compromise its function. Installing non-authorised components and making non-approved modifications or conversions can compromise safety and may invalidate the warranty.
For replacements, use only original spare parts supplied or approved by Viessmann.

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Intended use

The appliance is only intended to be installed and operated in sealed unvented heating systems that comply with EN 12828, with due attention paid to the associated installation, service and operating instructions as well as the details in the datasheet.
It is only designed for the heating up of heating water.

Commercial or industrial usage for a purpose other than the heating up of heating water shall be deemed inappropriate.

Intended use presupposes that a fixed installation in conjunction with permissible components designed for this purpose has been carried out.
Every other use will be deemed to be inappropriate. Any resulting losses are excluded from the manufacturer's liability.

Any usage beyond this must be approved by the manufacturer for the individual case.

Intended use also includes the adherence to maintenance and inspection intervals.

Steps - commissioning, inspection and maintenance

For further information regarding the individual steps, see the page indicated

Commissioning steps	Inspection steps	Maintenance steps		Page
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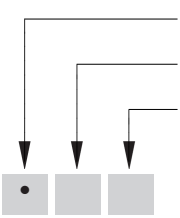
Steps - commissioning, inspection and… (cont.)



Commissioning steps

Inspection steps

Maintenance steps

Page

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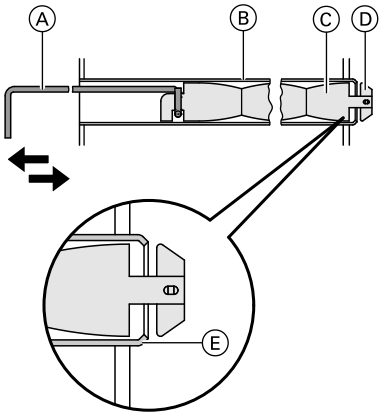
Further details regarding the individual steps

Commissioning the system

Operating and service instructions for the control unit and the burner

1. Close the gas shut-off valve and open the boiler door.
2. Check the seating of turbulators Ⓒ in hot gas flues Ⓑ. Turbulator spring clips Ⓓ must lock into place behind first constriction Ⓔ.



Ⓐ Turbulator extractor

3. Check that the installation room vent is open.
4. Fill the heating system with water and vent the system.
   Permissible operating pressure: 6 bar (0.6 MPa)
5. Enter the amount of fill water and water hardness into the table in chapter "Checking the water quality".

   Please note
   Unsuitable water quality can damage the boiler shell.
   Operate boilers only with softened water.
   Observe the "Water quality requirements" on page 27.

6. Check system pressure.
7. Check the oil level or the gas supply pressure.
8. Open the flue gas damper (if installed).
9. Check that the cleaning aperture on the flue outlet is closed.
10. Open the shut-off valves in the oil or gas line.
11. Switch ON the mains isolator, the switch for the heating circuit pump and the burner ON/OFF switch, in that order. Observe the burner manufacturer's operating instructions.

Further details regarding the individual steps (cont.)

12. The dew point range must be cleared as quickly as possible. For this reason prevent all heat supply to consumers when heating the system from cold. This also applies when restarting after maintenance and cleaning work.

Please note
During boiler heat-up, unpleasant fumes and odours can result from outgassing from the thermal insulation, the thermal block and the paint.
Vent the room during commissioning.

13. After the flow temperature has been reached, switch ON the heat consumers in sequence and change the burner over to automatic mode.

Please note
Internal gas emissions from the thermal block can lead to increased CO values in the flue gas.
Continue to operate the boiler until a decline can be clearly recognised.

14. Check all gaskets and plugs, and retighten if necessary.

15. Check the boiler door and cleaning cover after approx. 50 hours run and retighten all screws.

Shutting down the system

1. Switch OFF the mains isolator or the power supply, and safeguard against unauthorised reconnection.

2. Interrupt the burner power supply. If installed, pull plug-in connectors 41 and 90 from the burner.

3. Close the gas shut-off valve.

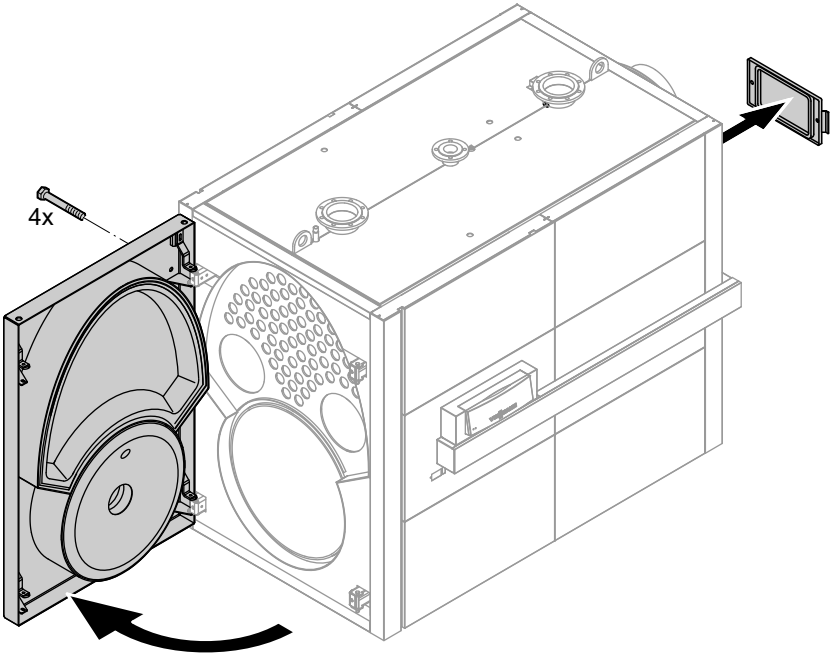
Danger
Heating water escaping under pressure will injure bystanders.
Only open the connections on the heating water side after the boiler has been depressurised.

Please note
Draining the boiler with a suction pump will create negative pressure inside the boiler.
Only drain the boiler with a suction pump when the air vent valve is open.

Further details regarding the individual steps (cont.)

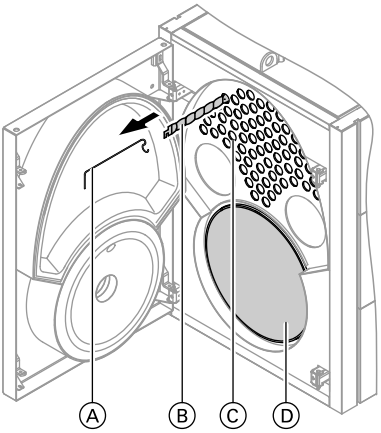
Opening the boiler door and cleaning cover

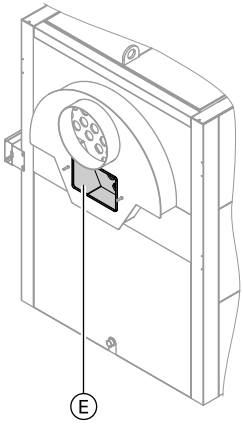
Note
On gas burners, disconnect the gas supply pipe.



Further details regarding the individual steps (cont.)

Cleaning the turbulators, heating surface, flue outlet and flue pipe





1. Pull turbulators Ⓑ out towards the front with a quick tug. For this, use turbulator extractor Ⓐ from the cleaning equipment.

2. Clean flues Ⓒ and combustion chamber Ⓓ with the brush. Remove combustion residues with a vacuum cleaner.

3. Remove combustion residues from the flue pipe and the flue outlet through the cleaning aperture in flue outlet Ⓔ using a vacuum cleaner.

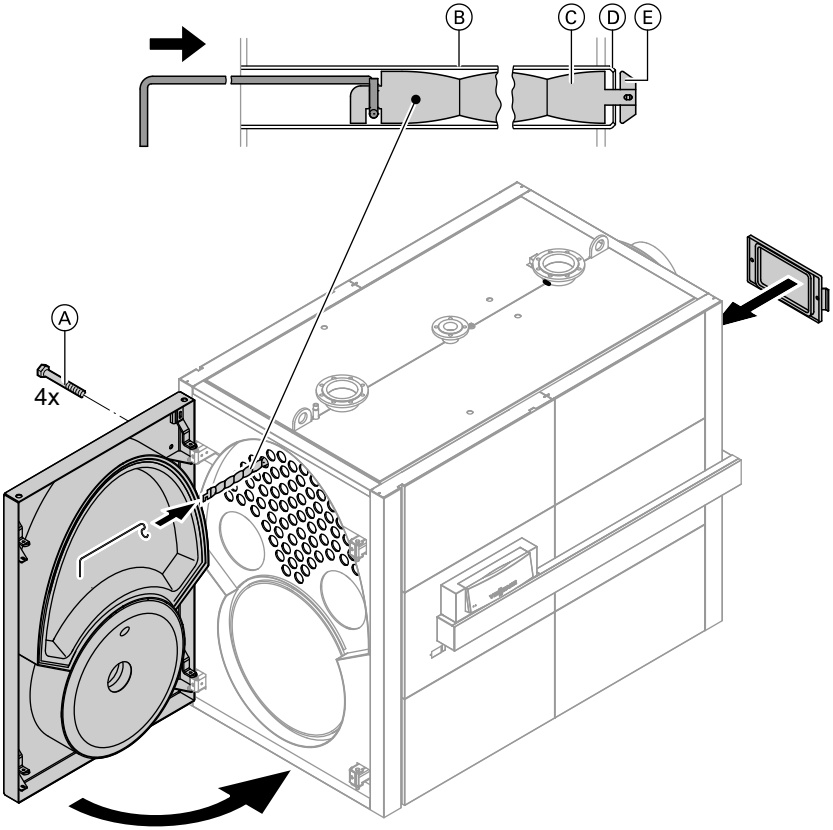
Further details regarding the individual steps (cont.)

Inserting turbulators, securing the boiler door and cleaning cover

Note
On gas burners, mount the gas supply pipe.

Check all gas connections for tightness.

Danger
Escaping gas leads to a risk of explosion.



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Further details regarding the individual steps (cont.)

1. Push turbulators Ⓒ far into hot gas flues Ⓑ. Spring clip Ⓔ must snap into place behind first constriction Ⓓ.

   Note
   This snapping into place prevents the turbulators from slipping forward during boiler operation.

2. Tighten screws Ⓐ crosswise (torque 25 Nm).

   Danger
   Leaks can lead to risk of poisoning through escaping gas.
   Check gaskets carefully.

Checking the function of the safety equipment

Check safety valves, water level and pressure limiter in accordance with manufacturer's details.

Checking the expansion vessel and system pressure

Expansion vessel manufacturer's documentation

Note
Check when system is cold.

Expansion vessel

1. Drain the system until the pressure gauge shows "0". Alternatively: Close the cap valve on the expansion vessel and reduce the pressure in the expansion vessel.

   Note
   The pre-charge pressure of the expansion vessel (p_0) is made up of the static system pressure (p_{St}) (= static head) and a supplement: $p_0 = p_{St}$ + supplement.
   The supplement depends on the high limit safety cut-out setting. The following applies:
   - *100 °C: 0.2 bar (0.02 MPa)*
   - *110 °C: 0.7 bar (0.07 MPa).*

2. If the pre-charge pressure of the expansion vessel is lower than the static system pressure: Top up with nitrogen until the pre-charge pressure is 0.1 to 0.2 bar (0.01 to 0.02 MPa) higher.
   The static pressure corresponds to the static head.

3. Top up with softened water[*1] until the charge pressure of the cooled system is 0.1 to 0.2 bar (0.01 to 0.02 MPa) higher than the pre-charge pressure of the expansion vessel.
   Permiss. operating pressure: 6 bar (0.6 MPa)

*[*1] For water quality requirements, see page.*

Further details regarding the individual steps (cont.)

Pump controlled pressure maintaining systems

In heating systems with automatic pressure maintaining systems provide individual protection by installing an expansion vessel for each boiler. This applies in particular to pump-controlled systems with integral deaeration.

Boiler output	**kW**	**up to 1000**	**up to 2100**
Expansion vessel	l	140	300

It reduces the frequency and level of pressure fluctuations. This contributes considerably to improved operational reliability and longer service life of the system components. Failure to observe these recommendations may result in damage to the boiler or to other system components.
Only use pump controlled pressure maintaining systems that are sealed against corrosion. The pressure maintaining systems must be protected against oxygen ingress into the heating water. Otherwise damage to the system through oxygen corrosion can result.

Pump controlled pressure maintaining systems with atmospheric deaeration through cyclical pressure release bring about central post-ventilation of the heating system. They do not provide oxygen removal in the sense of corrosion protection as described in VDI 2035 Part 2.

Note
Check the pressure maintaining system in line with the manufacturer's instructions.

Please note
Cyclical pressure fluctuations and more significant pressure differentials point towards a system fault. Such faults result in damage to other heating system components.
Limit pressure fluctuations to the lowest possible differential.

Checking the water quality

Observe the instructions in chapter "Water quality requirements".

Further details regarding the individual steps (cont.)

Enter the amount of top-up water and the total hardness of the feed and boiler water into the table.

Meter reading m^3	Fill and top-up water m^3	Total water volume m^3	Total hardness		pH value	Date
			Feedwater	Boiler water		

The total hardness of the feed and top-up water must not exceed 0.11 °dH (total value of alkaline earths ≤ 0.02 mol/m^3).

The pH value should be between 9 and 10.5.

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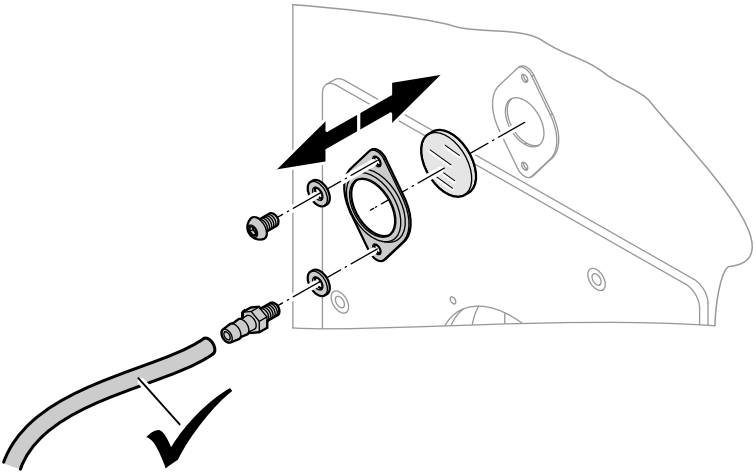
Further details regarding the individual steps (cont.)

Cleaning the sight glass in the boiler door



Note
Check the gaskets and hose connection for leaks.

Checking the mixer for ease of operation and leaks

1. Remove the motorised lever from the mixer handle.
2. Check the mixer for ease of operation.
3. Check the mixer for leaks. Replace the O-ring gaskets if the mixer is leaking.
4. Snap the motorised lever into place.

Adjusting the burner

Adjust the maximum oil or gas throughput of the burner to the rated boiler heating output.

Rated heating output	Pressure drop on the hot gas side	
kW	Pa	mbar
700	270	2.7
900	460	4.6
1100	400	4.0
1300	570	5.7

Further details regarding the individual steps (cont.)

Rated heating output	Pressure drop on the hot gas side	
kW	Pa	mbar
1600	650	6.5
1950	850	8.5

To protect the system against dew point corrosion, burner stage 2 (full heating output) must be set to the rated boiler heating output. It must remain switched on, also during the summer months (burner stage 2 on constant standby).

Partial load operation

Set the minimum heating output for the base load stage in accordance with the flue system. The flue system must be suitable for the low flue gas temperatures.

In the case of frequent cycling in standby mode and for partial loads below 40 % we recommend that you:
- Insulate the flue gas collector
- Install a motorised flue gas damper
- Set the minimum runtime of the boiler to 10 min

This extends the service life and reduces running costs.

Operation with burner load ≥ 60 %

The minimum boiler water temperature for oil operation is 50 °C and for gas operation 60 °C.

Instructing the system user

The installer should instruct the user in the operation of the system.

Adjust the return temperature raising facility to a minimum of 40 °C (oil operation) or 53 °C (gas operation).
To protect the boiler, the minimum heating output in the base load stage is set to 60 % of the rated heating output (see table).

Rated heating output	Minimum heating output to be set (burner stage 1)
kW	kW
700	420
900	540
1100	660
1300	780
1600	960
1950	1170

A minimum flue gas temperature is required for the base load stage, the value of which is subject to the design of the flue system.

Operation with burner load ≥ 40 % and < 60 %

The minimum system temperatures (flow/return) are 60/50 °C for oil operation and 70/60 °C for gas operation.

Operation with burner load < 40 %

The minimum system temperatures (flow/return) are 60/55 °C for oil operation and 70/65 °C for gas operation.

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Further details regarding the individual steps (cont.)

Operating and service documents

1. Complete and detach the customer registration card:
   - Hand the system user their section for safekeeping.
   - Retain the heating contractor's section.

2. File all parts lists, operating and service instructions in the folder and hand this over to the system user.
   The installation instructions are no longer required after the appliance has been installed. They do not need to be retained.

Parts list

Information on ordering spare parts
Quote the part and serial numbers (see type plate) and the position number of the required part (as per this parts list). Standard parts are available from your local supplier.

Parts
001 Boiler door
002 Studs
003 Sight glass pack, comprising pos. 004 to 007
004 Sight glass frame pack
005 Gasket
006 Hose nozzle
007 Plastic hose
008 Hose pack Ø 18 mm
009 Upper insulation block
010 Lower insulation block
011 Thermal insulation mat
012 Packing GF 25 x 15
013 Turbulator
014 Gasket, flow/return
015 Gasket, safety valve
016 Cleaning cover
017 Packing
018 Sensor well, boiler water temperature sensor
200 Cover panel, front
201 Cover panel, back
202 Front panel, top (only for 1600 and 1950 kW)
203 Front and back panel, top
204 Front panel, bottom
205 Back panel, bottom
206 Side panel
207 Side panel, control unit
208 Centre rail
209 Front r.h. rail
210 Front l.h. rail
211 Back r.h. rail
212 Back l.h. rail
213 Thermal insulation jacket
214 Thermal insulation jacket, centre (only for 1100 to 1950 kW)
215 Thermal insulation mat, back
216 Thermal insulation mat, l.h. back
217 Thermal insulation mat, r.h. back
218 Mounting bracket, back
219 Mounting bracket
220 Channel retainer
221 Cable channel, upper section
222 Cable channel, lower section
223 Edge protector
224 Cover, sensor coupling
225 Thermal insulation mat, front
226 Thermal insulation mat, l.h. front
227 Thermal insulation mat, r.h. front
228 Mounting bracket, fascia
307 Vitoplex 200 logo
308 Viessmann logo

Wearing part
020 Cleaning brush

Accessories
021 Brush handle
022 Extension piece
023 Turbulator extractor
024 Burner plate pack
025 Burner plate gasket[*2]
229 Back panel retrofit kit[*3], not shown

Parts not shown
300 Thermal insulation pack
301 Touch-up spray paint, Vitosilver
302 Touch-up paint stick, Vitosilver
303 Installation instructions
304 Service instructions

[*2] *For sizes 700 and 900 kW with seal ring; for sizes 1100 to 1950 kW with glass fibre-reinforced fabric ribbon*
[*3] *Suitable for pos. 216 and 217*

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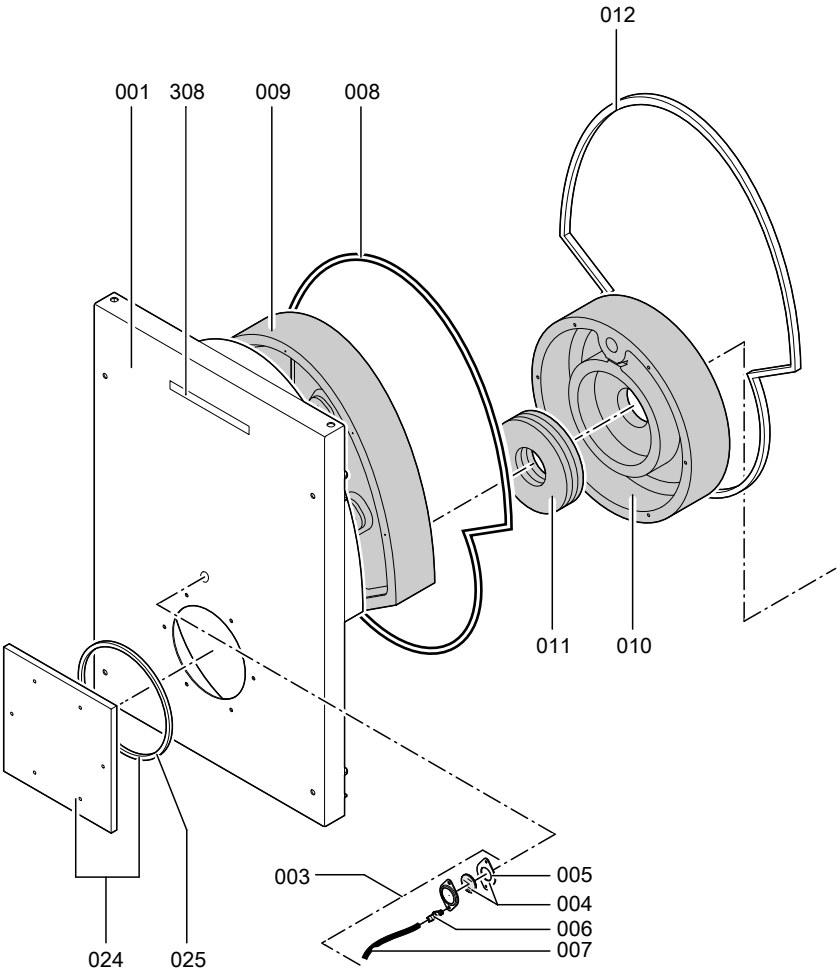
Parts list (cont.)

305 Decorative adhesive tape
306 Flame tube gasket pack

Ⓐ Type plate, optionally left or right
Ⓑ Boiler control unit (see parts list in the service instructions of the boiler control unit)
Ⓒ Burner cable (see parts list in the service instructions of the boiler control unit)

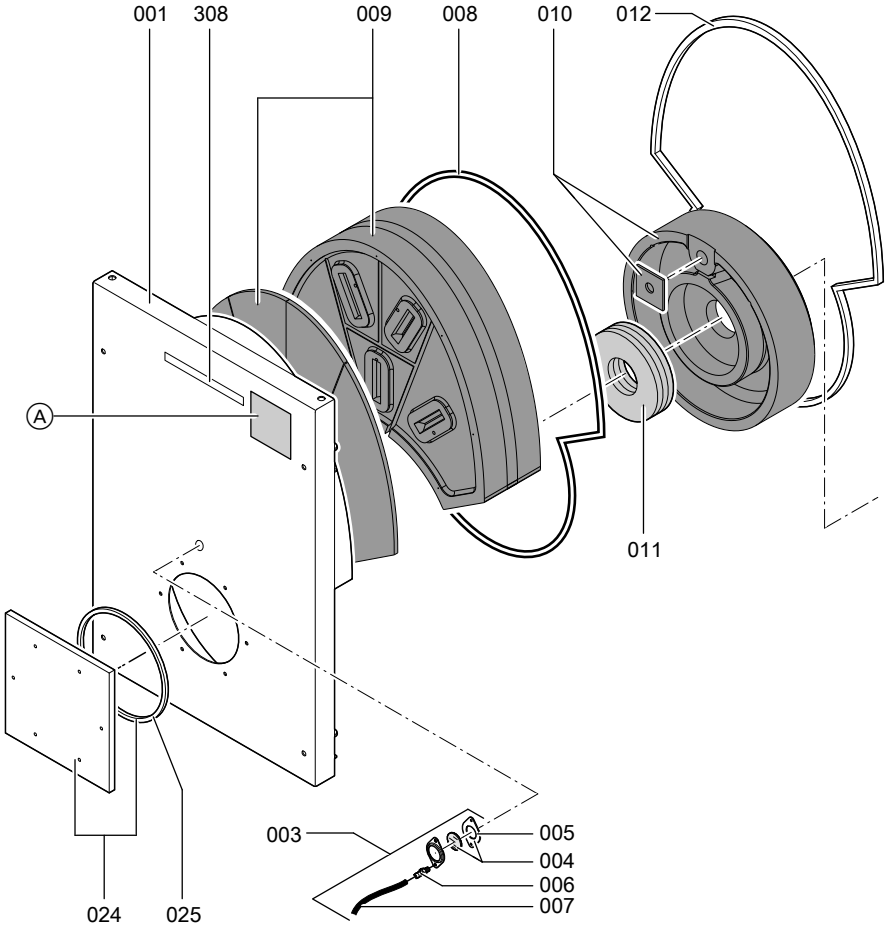
Parts list (cont.)

For boiler sizes 700 to 1300 kW

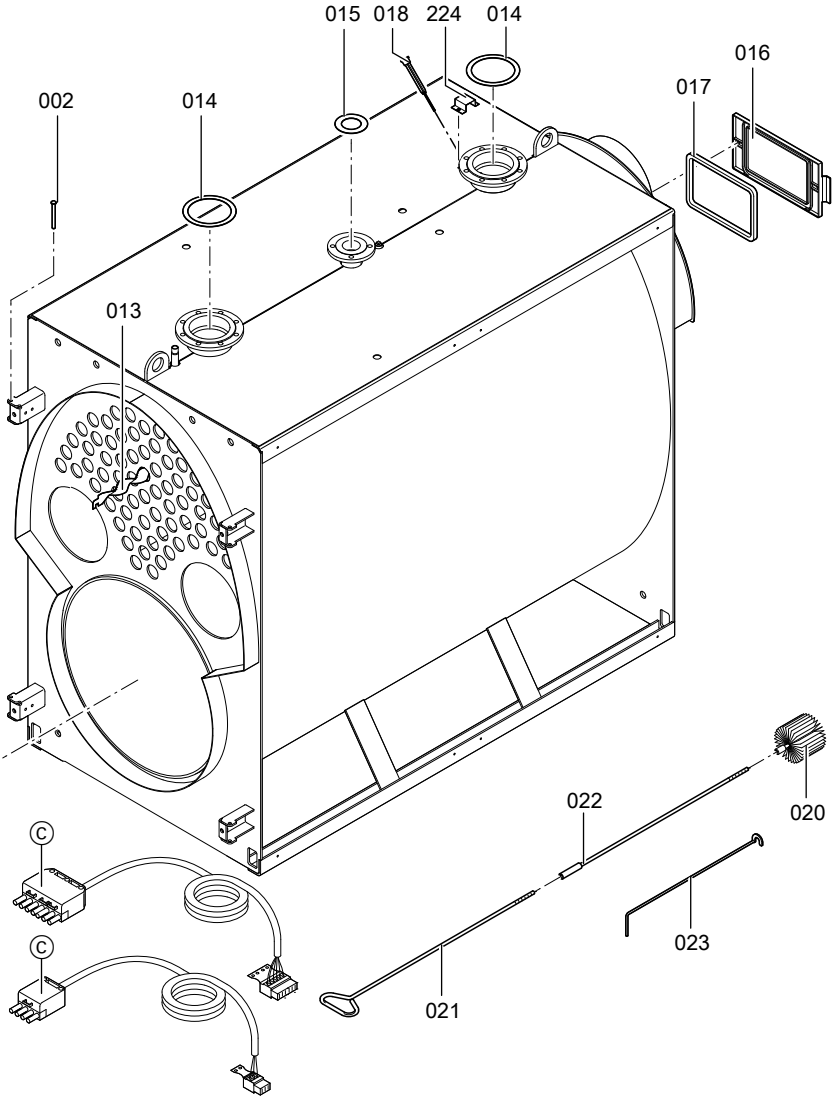


Parts list (cont.)

For boiler sizes 1600 to 1950 kW



Parts list (cont.)



Note on position number 013

Rated output kW	700	900	1100	1300	1600	1950
Quantity	42	42	52	52	52	64

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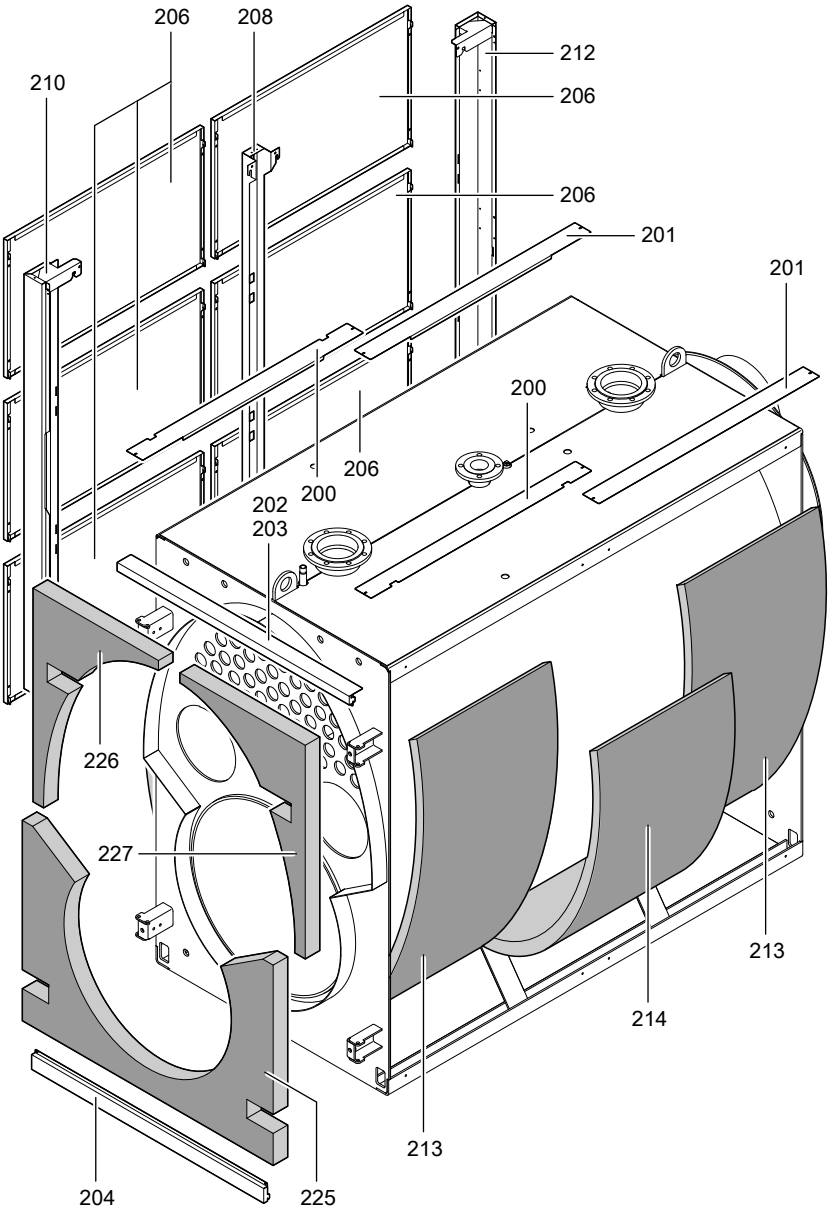
Parts list (cont.)



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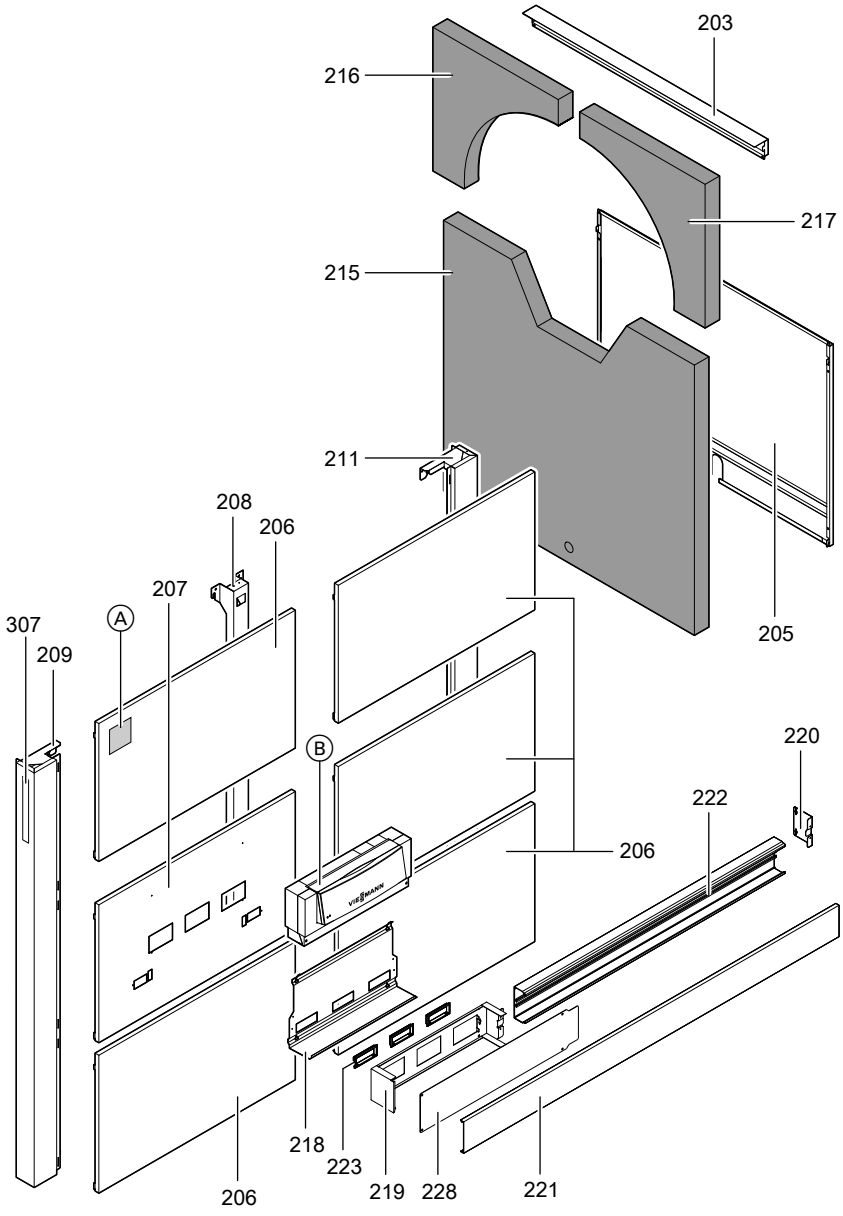
Parts list (cont.)



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Water quality requirements

Note
Observing the following requirements is necessary to safeguard your warranty rights.
The warranty excludes damage due to corrosion and scaling.

Heating systems with rated operating temperatures up to 100 °C (VDI 2035)

Water used in heating systems must meet the chemical levels of the Drinking Water Ordinance [Germany]. If well water or similar is used, it should be tested for suitability before filling the system.
Prevent excessive scale build-up (calcium carbonate) on the heating surfaces. For heating systems with operating temperatures up to 100 °C, the Directive VDI 2035 sheet 1 "Prevention of damage in water heating installations – Scale formation in domestic hot water supply installations and water heating installations" applies [in Germany; check local regulations] with the following standard values. For further information, see the annotations to Directive VDI 2035.

Total heating output in kW	> 50 to ≤ 200	> 200 to ≤ 600	> 600
Total alkaline earths in mol/m³	≤ 2.0	≤ 1.5	< 0.02
Total hardness in °dH	≤ 11.2	≤ 8.4	< 0.11

The standard values assume the following:
- The total volume of fill and top-up water will not exceed three times the water content of the heating system during its service life.
- The specific system volume is less than 20 l/kW heating output. In multi boiler systems, apply the output of the smallest boiler.
- All measures to prevent corrosion on the water side in accordance with VDI 2035 sheet 2 have been implemented.

Soften the fill and top-up water in heating systems operating under the following conditions:
- The total of alkaline earths in the fill and top-up water exceeds the standard value.
- Higher fill and top-up water volumes are expected.
- The specific system volume is greater than 20 l/kW heating output. In multi boiler systems, apply the output of the smallest boiler.

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Water quality requirements (cont.)

When engineering the system, observe the following:
- Install shut-off valves in the different sections. This prevents the need for draining all the heating water in the case of repairs or system expansion.
- Install a water meter to record the amount of the fill and top-up water. Enter the volume of fill water and the water hardness into the boiler service instructions.
- For systems with a specific system volume in excess of 20 l/kW output (for multi boiler systems, apply the output of the smallest boiler), apply the requirements of the next highest category of total output (in accordance with the table). In the case of severe excess (> 50 l/kW), soften the water down to a total of alkaline earths of ≤ 0.02 mol/m^3.

Operating information:
- Commission the system step by step, starting with the lowest boiler output and a high heating water flow rate. This prevents a localised concentration of limescale deposits on the boiler heating surfaces.
- In multi boiler systems, start all boilers simultaneously to prevent the entire limescale deposit settling in the heat transfer area of just one boiler.
- During expansion or repair work, only drain the necessary sections.
- Where water treatment is required, treat even the first fill of the heating system prior to commissioning. This also applies to any subsequent filling, e.g. after repairs or after system expansion, and for all amounts of top-up water.
- Check, clean and activate filters, dirt traps and other blow-down or separating facilities in the heating water circuit more frequently after commissioning or new installations; later on do so subject to requirements in line with the water treatment applied (e.g. water softening).

The build-up of limescale deposits on the heating surfaces will be minimised if these instructions are observed.
If limescale deposits have formed because of a failure to observe the requirements of directive VDI 2035 the service life of the installed heating appliances will in most cases already have been reduced. Removing the limescale deposits is one option for restoring operational viability. This must be carried out by Viessmann Industrieservice or a specialist company. Inspect the heating system for possible damage prior to returning it into use. It is essential that the faulty operating parameters are corrected to prevent renewed formation of excessive scale deposits.

Prevention of damage through corrosion on the water side

The corrosion resistance of ferrous materials on the heating water side of heating systems and boilers depends on the absence of oxygen in the heating water.

The oxygen introduced into the heating system with the first fill and the top-up water reacts with the system materials without causing damage.

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Water quality requirements (cont.)

The characteristic blackening of the water after some time in use indicates that free oxygen is no longer present. The technical rules and in particular VDI Directive 2035-2 therefore recommend that heating systems are designed and operated so that a constant ingress of oxygen into the heating water is prevented.

Opportunities for oxygen ingress during the operation:
- Through overflowing open expansion vessels
- Through negative pressure in the system
- Through gas-permeable components

Sealed unvented systems, e.g. with a diaphragm expansion vessel, offer good protection against the ingress of airborne oxygen into the system, if correctly sized and operating at the correct pressure.
At every part of the heating system, even at the suction side of the pump and under all operating conditions, the system pressure should be above ambient atmospheric pressure.
The pre-charge pressure of the diaphragm expansion vessel should be checked at least during the annual service.

The use of permeable components, e.g. plastic pipes that are permeable to gas in underfloor heating systems, should be avoided. Provide system separation if such components are nevertheless used. This must separate the water flowing through the plastic pipes from other heating circuits, e.g. from the heat source, by the provision of a heat exchanger made of corrosion-resistant material.
No further anti-corrosion measures are required for sealed hot water heating systems subject to the above points being observed.
However, take additional precautions where there is a risk of oxygen ingress, for example by adding oxygen binder sodium sulphite (5 - 10 mg/litre into the excess). The heating water should have a pH value between 9.0 and 10.5.
Different conditions apply to systems that contain aluminium components.
Where chemicals are used as part of the corrosion protection, we recommend that the manufacturer of the chemicals issues a certificate of suitability of the additives with regard to the boiler materials and the materials of the other heating equipment components.
We recommend you refer questions of water treatment to Viessmann industrial services or an appropriate specialist.
Further details can be found in VDI Directive 2035-2 and EN 14868.

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Using antifreeze in boilers

Viessmann boilers are designed and built for water as a heat transfer medium. To protect boiler systems from frost, it may be necessary to treat the boiler water or circulating water with antifreeze.

When doing so, observe the following:
- In general, follow the specifications given by the antifreeze manufacturer.
- The properties of antifreeze and water are very different.
- The temperature stability of the antifreeze must be sufficient for the particular application.
- Check the compatibility with sealing materials. If other sealing materials are used, take this into account when designing the system.
- Antifreeze developed especially for heating systems contains inhibitors and buffer substances for corrosion protection as well as glycol. When using antifreeze, always observe the manufacturer's instructions regarding minimum and maximum concentrations.
- The concentration must never fall below the prescribed minimum level, subject to the required frost protection temperature. Check and adjust the pH value and frost protection (measure the density) regularly, at least once a year, according to the manufacturer's instructions.
- Check with the relevant supplier whether antifreeze may affect system components that are not part of the boiler, such as pumps, electrically and pneumatically driven valves, other types of valves, gaskets, etc.
- If the system is filled with antifreeze, it must be marked accordingly.
- If a boiler system is changed to operate without antifreeze, flush the system in order to remove all traces of the antifreeze.
- The quality of the boiler water and feedwater must meet the requirements of Directive VDI 2035.
- The systems must be designed as sealed unvented systems, as the antifreeze inhibitors decrease rapidly if airborne oxygen is allowed to enter.
- Diaphragm expansion vessels must comply with DIN 4807 [or local regulations].
- Solder connections should preferably be made with Ag or Cu hard solder. If liquids containing chlorides are used for soft soldering, any deposits must be removed from the circuit afterwards through thorough flushing. A higher chloride content in the heat transfer medium can cause corrosion damage.
- Only use oxygen diffusion-resistant hoses or metal hoses for flexible connections.
- Never equip the system on the primary side with zinc-plated heat exchangers, containers or pipes as zinc can be corroded by glycol/water mixtures.
- To avoid the risk of corrosion, ensure that there is no difference in electrical potential between system components that are in contact with antifreeze.
- Route all pipes in such a way that circulation cannot be interrupted by gas cushions or deposits.
- The water circuit must always be filled up to the highest point with the heat transfer medium.

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Using antifreeze in boilers (cont.)

- After filling, ensure there are no more air cushions in the system. When the temperature falls, gas cushions form negative pressure and this can draw air into the system.
- After initial filling and commissioning, but after 14 days at the latest, clean the integral dirt trap so the heat transfer medium can flow freely.
- Following any losses through leaks or drawing off, top up the antifreeze solution according to the concentration already in place. Establish the volume of antifreeze as a check.

Commissioning/service reports

	Commissioning	**Service**	**Service**
date:			
by:			

	Service	**Service**	**Service**
date:			
by:			

	Service	**Service**	**Service**
date:			
by:			

	Service	**Service**	**Service**
date:			
by:			

	Service	**Service**	**Service**
date:			
by:			

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Specification

Rated heating output	**kW**	**700**	**900**	**1100**	**1300**	**1600**	**1950**
Flue gas parameters[*4]							
Temperature at boiler water temperature 60 °C							
– at rated heating output	°C	180					
– at partial load (60 %)	°C	125					
Temperature at boiler water temperature 80 °C	°C	195					
Product ID		CE-0085BQ0020					
Efficiency η at							
■ 100 % of the rated heating output (80/60 °C)	%	92.2	92.2	92.2	92.3	92.2	92.3
■ 30 % of the rated heating output (65/55 °C)	%	96.4	96.5	96.6	96.6	96.5	96.6

*[*4] Values for sizing the flue system to EN 13384 relative to 13 % CO_2 for fuel oil EL and 10 % CO_2 for natural gas.*

Declaration of conformity

We, Viessmann Werke GmbH&Co KG, D-35107 Allendorf, declare as sole responsible body, that the following product complies with the standards specified:

Vitoplex 200, type SX2A, 700 to 1950 kW
with the Vitotronic boiler control unit

EN 267
EN 303
EN 676
EN 14394
EN 50090-2-2
EN 55014-1
EN 55014-2
EN 60335-1
EN 60335-2-102
EN 61000-3-2
EN 61000-3-3
EN 62233
TRD 702

In accordance with the following Directives, this product is designated with **CE-0085**:

2004/108/EC
2006/42/EC
2006/95/EC
2009/142/EC

This boiler meets the requirements of all current TRD regulations.

Allendorf, 22 February 2013

Viessmann Werke GmbH&Co KG

Authorised signatory Manfred Sommer

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Manufacturer's certificate according to the 1st BImSchV [Germany]

We, Viessmann Werke GmbH&Co KG, D-35107 Allendorf, confirm that the product **Vitoplex 200, type SX2A, 700 to 1950 kW** complies with the following conditions stipulated by the 1st German Immissions Order (BImSchV):

- NO_x limits in accordance with paragraph 6 (1).
- Flue gas loss of max. 9 % in accordance with paragraph 10 (1).
- Standard seasonal efficiency [to DIN] of at least 94 % in accordance with paragraph 6 (2).

Allendorf, 22 February 2013

Viessmann Werke GmbH&Co KG

Authorised signatory Manfred Sommer

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Applicability

Serial No.:

7438485	7438486	7438487	7438488
7438489	7438490		

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